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# PATENT ABSTRACTS OF JAPAN

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(71) Applicant: OKI ELECTRIC IND CO LTD

(72) Inventor: TERA0 YOSHITAKA

## (54) MANUFACTURE OF FIBER GRATING, SUPPORT MEMBER, MASK AND OPTICAL FILTER

Those movement and rotation are performed by necessary distance.

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### (57) Abstract:

**PROBLEM TO BE SOLVED:** To obtain a fiber grating which is longer than a diffraction grating by performing exposure while moving a mask and rotating a support member around its axis so that parts of the diffraction grating and parts of an optical fiber pass through an irradiation area of exposure light one after another.

**SOLUTION:** The mask 15 and columnar support member 13 are set opposite to each other in such position relation that the length of the diffraction grating of the mask 15 is along the tangent of the exposure optical fiber 11 wound spirally around the columnar support member 13. Then the movement of the mask 15 and the rotation of the columnar support member 13 around its axis (ab) are performed so that the parts of the diffraction grating along the length and the parts of the exposure optical fiber 11 wound around the columnar support 13 pass through the irradiation area 19 of the exposure light one after another respectively.

